



## Sergei Leonov

Composer,  
Sound artist

**Born in 1994**, he is a graduate of the St. Petersburg College of Music and State Conservatory. During his studies, he was a member of numerous ensembles performing contemporary and early music at concerts and festivals in Russia and Europe. As a performer, he takes part in a wide variety of cultural events - from theater and film productions to visual art exhibitions and classical music concerts in Russia's leading concert halls. Organizer of several experimental vocal music art projects as part of the "Sound Ways" festival (2019) and the "Diaghilev Festival" (2021). In 2022, he obtained a master's degree in mixed composition from the Haute école de musique de Genève. He currently works as an assistant at the Geneva University of Art and Design, and is pursuing his artistic career by collaborating with numerous contemporary music ensembles in Europe, such as Vortex ensemble, HYPER DUO, Suono Giallo ensemble, creating mixed music pieces, sound installations and live sets in the field of scientific art for the Nicati competition (Luzern, 2023), the IRCAM Forum (Paris, 2024) and other festivals. In his work, he combines various repetitive music techniques with the exploration of the sound spectrum, often mixing folk and scientific themes, and experiments with pop synthesizer sounds and classical instrumental timbres.

## «Unity»



During the Composer's next Generation residency with Ensemble Vortex in Geneva, the author attempted to develop the idea of the artist's collaboration with artificial intelligence, and to try to understand how its rapid development over the past year is changing the world and art. How can several artificial intelligences designed to perform specific tasks (writing lyrics, synthesizing a unique voice timbre, creating a melody, video synthesis and image processing) work on a complex multimedia project involving pop music, a stage show with light and video, and experimental electronic music with improvisation? The author asked chatGPT to write a complex literary text about eternal love, and consulted it on the images the artificial intelligence sees to realize this text on stage. Several other programs were used for the vocal and video synthesis, and the composer did the video editing and some effects, wrote the instrument parts and electronics, and joined the performers by playing a modular synthesizer himself.

09. 12. 2023    Genève, Ensemble Vortex

YouTube: <https://youtu.be/NawNgeLC8EE?si=ICtS8Y-sYgqd-aC->



## «Freyja»



In this performance, the author strives to take a fresh look at sacred music. With the help of the latest technologies, he enables the unknown part of life to address the audience through sound. The performer is a conductor who refers to the plant and, through it, to the metaphysical, using a variety of sonic and emotional methods, thus establishing a connection between the two parts. It's a desperate prayer and a scientific experiment, transcendent states and programming codes, electricity as the primordial energy of the universe and as a resource for machines.

Most of the sounds presented here are produced by plants. Electrodes attached to them enable their diagrams to be recorded, and this information then used to synthesize sounds, produce cvs to modify the parameters of a modular synthesizer during performance, sound effects and so on. Using a variety of sounds, the performer attempts to influence their biological rhythms and elicit their reaction. In this way, technology enables the unknown parts of life to address an audience through sound. The title of the work refers to the Scandinavian nature goddess Freyja.

23.08.2023 - Luzern

YouTube: [https://youtu.be/thpWilcxFlo?si=BSbBuX\\_Vq7nsIT1o](https://youtu.be/thpWilcxFlo?si=BSbBuX_Vq7nsIT1o)

## «Catching»



The interactions between the visual and sonic parts of the small particles in this multimedia piece offer a new version of repetition music, where the listener's attention can pick up several patterns at once, and where repetition works with short-term memory to challenge perception. Smaller repetitions are folded into larger ones, forming several superimpositions that address the listener's subconscious via signals. The resonance of sound is embodied in image, and the texture of video is synthesized in sound.

22.07.2023 - Sansepolcro, Ensemble Suono Giallollo

YouTube: <https://youtu.be/ygY87VWSCJ0?si=yD8a2DzwNbiTU2py>



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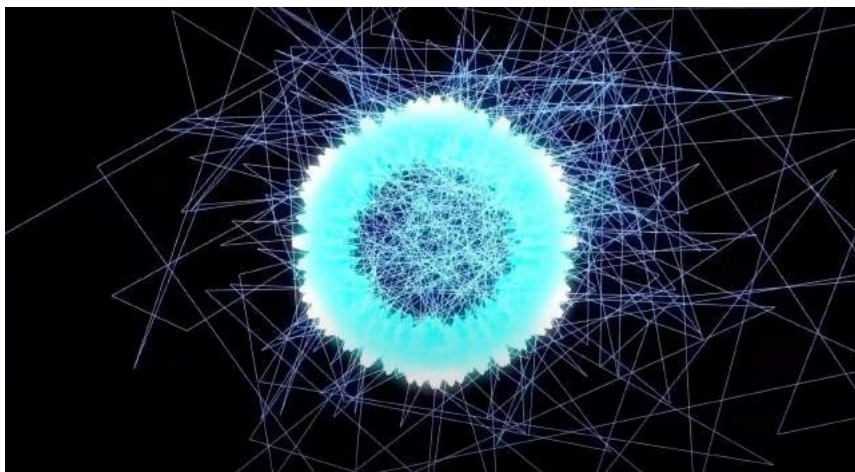
## «Appearances»

Octobre 2022 - en cours

The project involves collaboration with scientist Vadim Yanovsky, who studies plasma disruption problems at the Institute of Plasma Physics of the Czech Academy of Sciences. The aim is to create a series of musical works / performances / sound installations dedicated to the theme of plasma synthesis as the new energy of the future. At present, there are numerous experimental tokamak installations around the world, but all of them are encountering, to one degree or another, commissioning difficulties. Plasma energy is unstable, huge like the sun, and essential for the future of mankind. In the joint work of a scientist and a musician, it is possible to find intuitive solutions or clues that may not be available with an absolutely scientific approach to this phenomenon.

### «Elemental»

The first work in the series is an audiovisual piece using sounds recorded from the magnetic coils of the Prague tokamak, a modular synthesizer and the voice of Swiss singer and performer Viola Albertine. The artist attempts to understand the physics of plasma instabilities and ruptures using sound composition methods. The ascending musical movement of increasing intensity expresses the magnetic substance's desire to unite



incompatible and achieve the transformation of matter into energy. At the same time, however, supernatural tensions and constraints underline the hidden irrationality of Maxwell's equations, transferring them from the plane of pure logic to the three-dimensional realm of emotions. The sudden fall into howling silence that follows reflects the collapse of the magnetic structure into chaos, leading eventually to relative stability and possible solutions.

YouTube: <https://youtu.be/I0paWu51hdw>

Website: <https://appearances.ch>

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## «Germination»

Février 2022 - en cours

The main idea of the project is to explore the possibilities of communication between musicians and plants through sound. To this end, a number of technical devices have been created on the basis of the "Biodata sonification" project, which capture changes in the electrical resistance of plants and create a real-time diagram. Researchers working on the Biodata sonification project have discovered that changes in electrical resistance

vary from plant to plant depending on time of day, soil moisture, light levels and stress levels (which are affected, for example, by physical injury or sound exposure). The real-time information received can be used in a variety of ways - from setting a certain sound parameter, varying between 0 and 1, to creating complex sound waveforms for synthesizing an individual timbre, and even controlling the shape of a piece of music. The aim of the project is to find models for interaction between a musician and a plant, and to explore opportunities for joint creativity.



YouTube: <https://youtu.be/c2iegTuZ9cw>

*Several events are associated with this project:*

## «Duo pour une plante et violon»

20.02.2022 - Genève, 22.02.2022 Neuchâtel



This is an attempt to present the communication between a plant and a musician within the framework of an academic piece and a duet model. Sometimes the plant determines the notes for the violinist, at other times it creates background sounds using the principle of synthesis with a waveform based on the plant's diagram.

*Running time - 11'20*

Performer - Maria Kalugina (violin)

YouTube: <https://youtu.be/5rOgnkY8OyU>



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## «Rhythm of life»

09.05.2022 - Genève

As part of the "Pint of Science" festival, a lecture-performance entitled "The Rhythm of Life" took place, where the germination project was presented with the participation of biologists from the University of Geneva. During the electronic live set, the audience could listen to music produced by carnivorous plants.

*Pint of Science is a science festival that takes place in a plethora of bars across the globe in May. The idea is simple: bring researchers into a relaxed environment to interact with them, ask them questions and get a better idea of how science is practiced today.*



## «Legumes en ville»

29.06.2022 - Genève

*With the support of the City of Geneva*

4 hours of improvisations with a modular synthesizer connected to a plant in duet with singer and ancient harp player Viola Albertine. The long duration of the performance made it possible to focus on the smallest changes in the state of various plant species and to use different combinations of instruments. The concert format involved free movement of the audience through the space of the city park, and a discussion of interaction with plants through music.



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## «Installations sonores au musée Ariana»

25. 10. 2021 - Genève

In collaboration with the Ariana Museum and the Geneva School of Music, two sound installations were created in the museum's rooms. The aim of the project was to translate physical matter into sound, to deepen the perception of exhibits through auditory experience, and to find new forms of musical performance in the museum space. For these installations,

the loudspeakers directional ultrasonics spatialized the synthesis's ever-changing sound and brought its perception closer to the visual experience, while modifying the spectrum brought out unusual details and allowed us to focus on part of the texture.



YouTube: <https://youtu.be/QaK6pSpaAEI>

## - PARTS -



### **Waves speaking (2022)**

**For 16 musicians and electronics**

Artistic reaction to the outbreak of war between Russia and Ukraine. An attempt to apprehend the new order through the new timbres of classical instruments interspersed with brutal synth pop in complex sonic textures.

*Running time - 15'45*

**Premiere - Geneva, Palladium. 03.06.2022**

Performers - Ensemble 21

YouTube:

<https://youtu.be/cPSajpC4Zzo>



### **Acid Tales of Fireflies (2023)**

**For flute, saxophone, MIDI keyboard, percussion and electronics**

The listener in this piece is an observer and unwitting decoder of an unknown signal language, which can be interpreted by various methods, from the perception of signage as a kind of Morse code, to harmonic pulsation, provoking, through synesthesia, subjective visual associations. In this way, diffusion arises at the periphery of the perceptual modes available to a person,

federates it, forcing it to adapt to communication with an unknown biological species that exists in the form of a musical work.

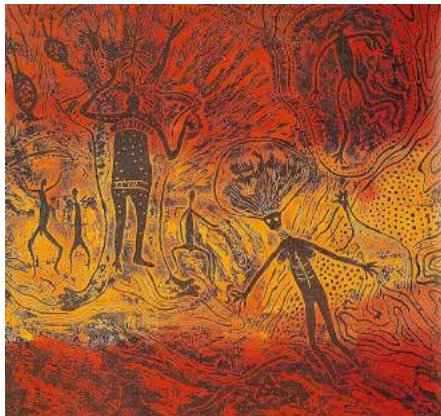
*Running time - 12'15*

**Premiere - Biel, La Voirie. 10.11.2023**

Performers - PlayTime Ensemble

YouTube: <https://youtu.be/VwdndoNxwrA>





### **Cute and shiny (2021)**

**For 3 voices, 3 alto flutes, 2 violins and electronics**

Theatrical sketches using emoji phonemes.

*"Just because something is cute doesn't mean it's cute in itself. It means it wants to be cared for and loved. It's the most powerful form of mind control."*

*Running time - 9'48*

**Premiere - Geneva, Palladium. 01.10.2021**

Performers - Solange Sierro, Borbála Szuromi, Maria Goncharenko and Ensemble 21

SoundCloud:

<https://soundcloud.com/cauchemr/cute-and-shiny-for-3-flutes-3-voices-2-violins-and-electronic-2021>

### **Will-O-Wisp (2020)**

**For electronics**



The will-o'-the-wisp is a luminous manifestation with the appearance of a small flame. Known and described for a long time, this manifestation was for a long time seen only as that of malignant spirits and grieving souls who came in the form of small flames to haunt deserted forests, swamps and cemeteries, and was the subject of a great deal of folklore, both about the origin of these spirits and about ways of getting rid of them.

*Running time - 4'56*

**Premiere - Geneva, "Archipel" festival. 03.04.2022**

YouTube:

<https://youtu.be/dwg93GU1KUg>



### **What...about? (2020)**

**For flute, clarinet, violin, cello and piano**

Distracted attention, focusing on the smallest details. Living fabric, the light of our star. Nature on the outside and nature on the inside.

*Running time - 7'31*

**Premiere - St.-Petersburg, Museum of Sound. 24.02.2020**

Performers - "Reheard" ensemble

SoundCloud:

<https://soundcloud.com/cauchemr/whatabout-2020-for-violin-cello-flute-clarinet-and-piano>

### **r/place (2019)**

**For 16 voices**



On the day of the April 2017 deception, a social experiment was launched in the form of a subreddit called "place". It featured a collaborative pixel art canvas, where each user could place a pixel of any color every five minutes. To create something meaningful, users had to unite in groups, coordinating their actions to create an image on the canvas in their own thread. This work uses texts from the Reddit forum, which were written by members of communities, which were created to take part in this event.

*Running time - 10'36*

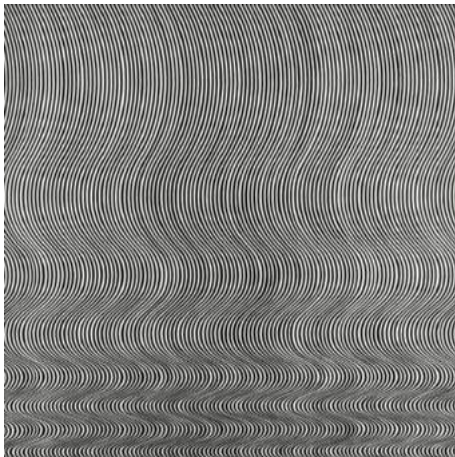
**Premiere - St.-Petersburg, "Sound ways" festival. 25.11.2019**

Performers - "Content-ensemble"

SoundCloud:

<https://soundcloud.com/cauchemr/rplace-2019-for-16-voices>





**Action tremor (2019)**

**For 2 pianos and 2 percussionists**

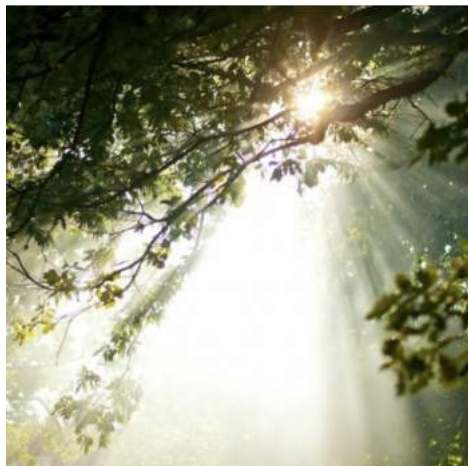
Action tremor is an involuntary, rhythmic muscle contraction resulting in jerking movements in one or more parts of the body. It is a common movement disorder that most often affects the hands, but can also occur in the arms, head, vocal cords, torso and legs.

*Running time - 8'09*

**Premiere - St.-Petersburg, festival "re:Musik". 04.05.2019**

SoundCloud:

<https://soundcloud.com/cauchemr/action-tremor-2019-for-2-pianos-and-2-percussionists>



**Scintillement du jour (2018)**

**For solo piano**

Prepared improvisation for piano based on impressions of autumn weather and the glint of sunlight through the foliage.

*Running time - 12'06*

**Premiere - St.-Petersburg, State Higher Conservatory. 21.06.2019**

Performer - Sergei Leonov

SoundCloud:

<https://soundcloud.com/cauchemr/scintillement-du-jour-2019-for-piano-solo>

